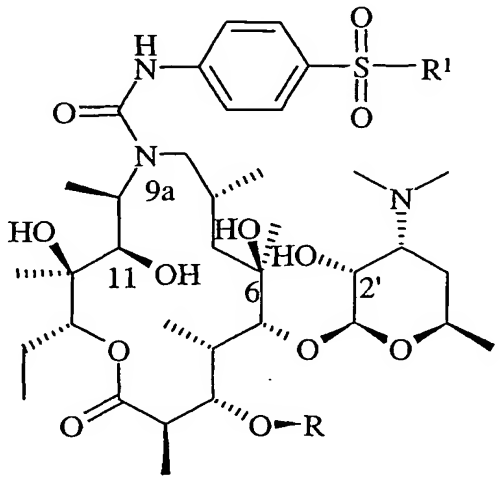
CLAIMS

1. Substituted 9a-N-{N'-[4-(sulfonyl)phenylcarbamoyl]} derivatives of 9-deoxo-9--dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosamynil-9-deoxo-9-dihydro--9a-aza-9a-homoerithronolide A of the general formula **1**,

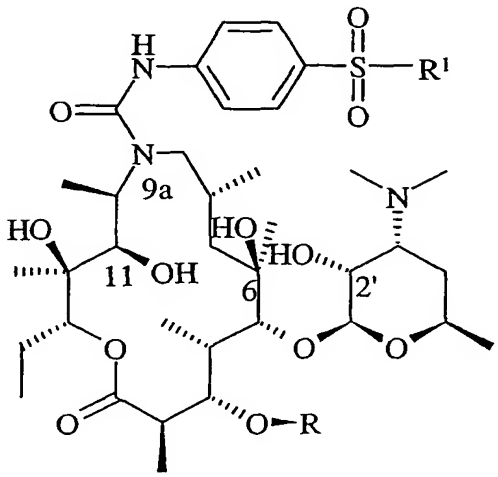


1

wherein R represents H or cladinosyl moiety, and R^1 represents chloro, amino, phenylamino, 2-pyridylamino, 3,4-dimethyl-5-isoxazolylamino and 5-methyl-3--isoxazolylamino group, and pharmacetically acceptable addition salts thereof with inorganic or organic acids.

2. A substance according to claim 1, characterized in that R^1 represents chloro group and R represents cladinosyl moiety.
3. A substance according to claim 1 characterized in that R^1 represents chloro group, and R represents H.
4. Substance according to claim 1 where R^1 represents amino group, and R represents cladinosyl moiety.
5. A substance according to claim 1, characterized in that R^1 represents phenylamino group, and R represents cladinosyl group.
6. A substance according to claim 1, characterized in that R^1 represents 2--pyridylamino group, and R represents cladinosyl group.

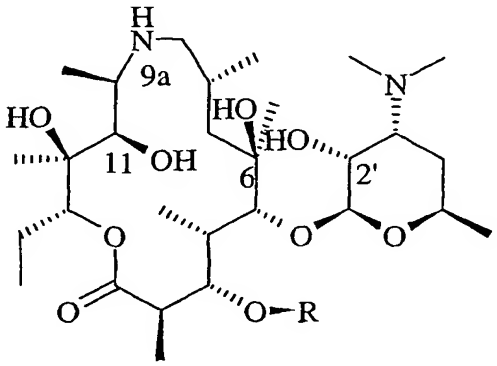
7. A substance according to claim 1, characterized in that R^1 represents 3,4-dimethyl--5-isoxazolyl group, and R represents cladinosyl moiety.
8. A substance according to claim 1, characterized in that R^1 represents 5-methyl-3--isoxazolylamino group, and R represents cladinosyl group.
9. A substance according to claim 1, characterized in that R^1 represents amino group and R represents H.
10. A substance according to claim 1, characterized in that R^1 represents phenylamino group, and R represents H.
11. A substance according to claim 1, characterized in that R^1 represents 2--pyridylamino group, and R represents H.
12. A substance according to claim 1, characterized in that R^1 represents 3,4-dimethyl--5-isoxazolylamino group, and R represents H.
13. A substance according to claim 1, characterized in that R^1 represents 5-methyl-3--isoxazolylamino group and R represents H.
14. A process for the preparation of substituted 9a-N-{N'-[4-(sulfonyl)phenyl carbamoyl]} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A of the general formula **1**,



1

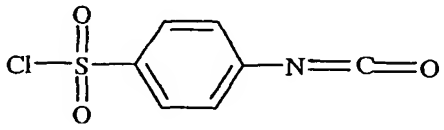
wherein R^1 represents chloro, amino, phenylamino, 2-pyridylamnio, 3,4-dimethyl-5--isoxazolylamino and 5-methyl-3-isoxazolylamino group and R represents H or cladinosyl group, characterized in that 9a-N-{N'-[4-(chlorosulfonyl)phenyl]-

carbamoyl} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5--O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 1, wherein R^1 represents chloro group and R represent H or cladinosyl group, which can be prepared by reaction of 9-deoxo-9-dihydro-9a-aza-9a-homoerythtromicin A or 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 2



2

wherein R represents H or cladinosyl group with 4-(chlorosulfonyl)phenyl isocyanate formula 3,



3

are subjected to a reaction with ammonia or amine of general formula 4,

$$R^2\text{-}NH_2$$

4

wherein R^2 represents H or phenyl, 2-pyridyl, 3,4-dimethyl-5-isoxazolyl or 5-methyl-3-isoxazolyl group, in toluene, xylene or some other aprotic solvent, at a temperature 0-110°C and then, if appropriate, to a reaction with inorganic or organic acids.

15. Pharmaceutical composition comprising a pharmaceutically acceptable carrier and an antibacterially effective amount of the substances according to claim 1.

16. A use of a substance of according to any claims 1-13 for preparing compositions for sterilization rooms and medical instruments as well as for protection of wall and wooden coatings.